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**IMPORTANT FAX DOCUMENT**

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DATE April 24, 2006  
NAME United States Patent and Trademark Office  
COMPANY  
FAX NUMBER (571) 273-8300  
FROM Michael J. Tempel   
REFERENCE NO. 10/688,600  
OUR FAX NUMBER 770-804-0900  
NUMBER OF PAGES 16

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Second Response in Application No. 10/688,600  
(Tunnel-Junction Structure Incorporating N-Type Layer Comprising  
Nitrogen And A Group VI Dopant)  
Filed: October 17, 2003  
Inventors: Michael Howard Leary et al.  
Examiner: Nguyen, Phillip  
Art Unit: 2828  
Conf. No. 2258  
Docket No. 10021234-1 (01015.0003U1)

**CONFIDENTIALITY NOTE**

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AVAGO TECHNOLOGIES, INC.  
P.O. Box 1920  
Denver, Colorado 80201-1920

ATTORNEY DOCKET NO. 10021234-1

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Michael Howard Leary et al.

Serial No.: 10/688,600

Examiner: Nguyen, Phillip

Filing Date: October 17, 2003

Group Art Unit: 2828

Title: Tunnel-Junction Structure Incorporating N-Type Layer Comprising Nitrogen And A Group VI Dopant

COMMISSIONER FOR PATENTS  
P.O. Box 1460  
Alexandria VA 22313-1460

TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT

Sir:

Transmitted herewith is/are the following in the above-identified application:

- ☒ Response/Amendment ☐ Petition to extend time to respond  
☐ New fee as calculated below ☐ Supplemental Declaration  
☒ No additional fee (Address envelope to "Mail Stop Amendments")  
☐ Other: (Fee \$ )

CLAIMS AS AMENDED BY OTHER THAN A SMALL ENTITY						
(1) FOR	(2) CLAIMS REMAINING AFTER AMENDMENT	(3) NUMBER EXTRA	(4) HIGHEST NUMBER PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	(6) RATE	(7) ADDITIONAL FEES
TOTAL CLAIMS	23	MINUS	23	= 0	X 50	\$ 0
INDEP. CLAIMS	4	MINUS	4	= 0	X 200	\$ 0
<input type="checkbox"/> FIRST PRESENTATION OF A MULTIPLE DEPENDENT CLAIM					+ 360	\$ 0
EXTENSION FEE	1 <sup>ST</sup> MONTH 120.00 <input type="checkbox"/>	2 <sup>ND</sup> MONTH 450.00 <input type="checkbox"/>	3 <sup>RD</sup> MONTH 1020.00 <input type="checkbox"/>	4 <sup>TH</sup> MONTH 1590.00 <input type="checkbox"/>		\$ 0
OTHER FEES						\$ 0
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT						\$ 0

Charge \$ 0 to Deposit Account 50-3718. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 50-3718 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 50-3718 under 37 CFR 1.16, 1.17, 1.19, 1.20 and 1.21. A duplicate copy of this transmittal letter is enclosed.

Respectfully submitted,

Michael Howard Leary et al.

By

*Michael J. Tempel*

Michael J. Tempel  
Attorney/Agent for Applicant(s)

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below:

Date of facsimile: April 24, 2006

Typed Name: Michael J. Tempel

Signature: *Michael J. Tempel*

Reg. No. 41,344

Date: April 24, 2006

Telephone No. (770) 709-0056

APR 24 2006

Patent  
Avago Technologies Docket No.: 10021234-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Michael Howard Leary *et al.*

Group Art Unit: 2828

Application No.: 10/688,600

Examiner: Nguyen, Phillip

Filed: October 17, 2003

Docket No.: 10021234-1

Confirmation No.: 2258

For: **Tunnel-Junction Structure Incorporating N-Type Layer Comprising Nitrogen  
And A Group VI Dopant**

SECOND RESPONSE

Mail Stop Amendment  
Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Smith Frohwein Tempel Greenlee Blaha LLC  
Customer Number 35856

Sir:

In response to the non-final Office Action mailed January 31, 2006, Applicants submit the following remarks.

A listing of claims begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

AUTHORIZATION TO DEBIT DEPOSIT ACCOUNT

It is not believed that extensions of time or fees for net addition of claims are required, beyond those, which may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. §1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to Avago Technologies Deposit Account No. 50-3718.

CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence, including any items indicated as attached or included, is being transmitted via facsimile transmission to the United States Patent and Trademark Office, (571) 273-8300, on the date indicated below.

Date: 4/24/06

Signature: Michael J. Tempel